



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Michelle M. HANNA

Appl. No.: 10/600,581

Filed: June 23, 2003

For: **Molecular Detection Systems  
Utilizing Reiterative  
Oligonucleotide Synthesis**

Confirmation No.: 8564

Art Unit: 1637

Examiner: Kim, Young J.

Atty. Docket: 2072.0010002/MAC/DJN

**Fourth Supplemental Information Disclosure Statement  
Under 37 C.F.R. §1.97(c)**

*Mail Stop Amendment*

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

Listed on accompanying IDS Forms, PTO/SB/08A and PTO/SB/08B, are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98.

Copies of documents **FP1** and **NPL1** to **NPL7** are submitted. However, in accordance with 37 C.F.R. § 1.98(a)(2), copies of U.S. patents and patent application publications, **US1** to **US12**, cited on the attached IDS Form, PTO/SB/08A, are not submitted.

The Examiner's attention is directed to the following co-pending U.S. Patent Applications, which are directed to related technical subject matter:

Application No. 10/425,037, inventor Hanna, filed April 29, 2003; published on

March 18, 2004 as 2004/0054162 A1; listed as Document S5 12/14/2006 HMARZI1 00000148 11234292 -180.00 OP  
12/14/2006 HMARZI1 00000148 11234292 -180.00 OP  
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Application No. 10/790,766, inventor Hanna, filed March 3, 2004; published on August 12, 2004 as 2004/0157257 A1; listed as Document **US6**;

Application No. 10/686,713, inventor Hanna, filed October 17, 2003; published on September 9, 2004 as 2004/0175724 A1; listed as Document **US7**;

Application No. 10/602,045, inventor Hanna, filed June 24, 2003; published on November 25, 2004 as 2004/0234996 A1; listed as Document **US8**;

Application No. 10/607,136, inventor Hanna, filed June 27, 2003, published on February 3, 2005 as 2005/0026150 A1; listed as Document **US9**;

Application No. 10/488,971, inventor Hanna, § 371 date: October 18, 2004; published on March 24, 2005 as 2005/0064414 A1; listed as Document **US10**;

Application No. 10/976,240, inventor Hanna, filed October 29, 2004; published on September 29, 2005 as 2005/0214796 A1; listed as Document **US11**; and

Application No. 10/551,775, inventor Hanna, § 371 date: October 3, 2005; published on September 14, 2006 as 2006/0204964 A1; listed as Document **US12**.

The identification of these U.S. Patent Applications is not to be construed as a waiver of secrecy as to those applications now or upon issuance of the present application as a patent. The Examiner is respectfully requested to consider the cited applications and the art cited therein during examination.



**Equivalent of Form PTO/SB/08A (07-06)**

Approved for use through 09/30/2006. OMB 0651-0031

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<b>FOURTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(Use as many sheets as necessary)</i>		Application Number	10/600,581
		Filing Date	June 23, 2003
		First Named Inventor	Michelle M. HANNA
		Art Unit	1637
		Examiner Name	Kim, Young J.
Sheet	1	of	1
		Attorney Docket Number	2072.0010002/MAC/DJN

## **U.S. PATENT DOCUMENTS**

## **FOREIGN PATENT DOCUMENTS**

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Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>2</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Substitute for form 1449B/PTO

**FOURTH SUPPLEMENTAL  
INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
(Use as many sheets as necessary)

Sheet

1 of 1

**Complete if Known**

Application Number	10/600,581
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First Named Inventor	Michelle M. HANNA
Art Unit	1637
Examiner Name	Kim, Young J.
Attorney Docket Number	2072.0010002/MAC/DJN

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
	NPL1	AIYAR, S.E., et al., "A Mismatch Bubble in Double-stranded DNA Suffices to Direct Precise Transcription Initiation by <i>Escherichia coli</i> RNA Polymerase," <i>J. Biol. Chem.</i> 269:13179-13184, American Society for Biochemistry and Molecular Biology, Inc. (1994)	
	NPL2	DAUBE, S.S., et al., "Coupling of RNA displacement and intrinsic termination in transcription from synthetic RNA DNA bubble duplex constructs," <i>Proc. Natl. Acad. Sci. USA</i> 91:9539-9543, National Academy of Sciences (1994)	
	NPL3	GOHARA, D.W., et al., "Poliovirus RNA-dependent RNA Polymerase (3D <sup>pol</sup> )," <i>J. Biol. Chem.</i> 275:25523-25532, The American Society for Biochemistry and Molecular Biology, Inc. (August 2000)	
	NPL4	GRIEP, M.A., and McHENRY, C.S., "Fluorescence Energy Transfer between the Primer and the β Subunit of the DNA Polymerase III Holoenzyme," <i>J. Biol. Chem.</i> 267:3052-3059, The American Society for Biochemistry and Molecular Biology, Inc. (1992)	
	NPL5	HANNA, M.M., and MEARES, C.F., "Topography of transcription: Path of the leading end of nascent RNA through the <i>Escherichia coli</i> transcription complex," <i>Proc. Natl. Acad. Sci. USA</i> 80:4238-4242, National Academy of Sciences (1983)	
	NPL6	KINSELLA, L., et al., "RNA Polymerase: Correlation Between Transcript Length, Abortive Product Synthesis, and Formation of a Stable Ternary Complex," <i>Biochemistry</i> 21:2719-2723, American Chemical Society (1982)	
	NPL7	PICKETTS, D.J., et al., "Differential termination of primer extension: a novel, quantifiable method for detection of point mutations," <i>Human Genetics</i> 89:155-157, Springer Verlag (1992)	

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Examiner Signature	Date Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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